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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/585,290

06/27/2007

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65866US(51697)

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02/11/2011

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EXAMINER

PATEL, VINOD D

ART UNIT

PAPER NUMBER

3742

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/585,290	<b>Applicant(s)</b> JONES ET AL.	
	<b>Examiner</b> VINOD D. PATEL	<b>Art Unit</b> 3742	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 30 September 2010.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 9/23/10 has been entered.

***Drawings***

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the self-contained power supply as claimed in claim 5 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an

Art Unit: 3742

application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 1-6 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claim 1, lines 7-8, limitation "an electrical connector contacting the electrical and thermally conductive area" is not supported by original specification.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-4 and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Lin et al. (US2003/0006229A1).

With respect to claim 1, Lin et al. discloses a flexible garment system (10) which is capable of emitting heat when an electrical current is applied, the flexible garment system comprising an electrically and thermally conductive area integrated into an electrically insulating base structure (14) and at least two yarn based power supply lines (16, 18) integrated into the fiber base structure, each of the power supply lines directly attached to power supply (32) an electrical connector contacting the electrically and thermally conductive areas as shown in Figures 1-2 (power supply connected to electrically and thermally conductive area similar to applicant's connection); wherein the conductive area and power supply lines are integrated into the fiber based structure during manufacture of the fiber base structure as shown in Figures 1-2 and described in paragraph [0010-0011, 0017- 0025].

With respect to claim 2, the electrically insulating fiber base (14) structure is made of rubber material or a polymeric material (paragraph [0023]).

With respect to claims 3 & 4, the electrically and thermally conductive area comprises the soft matrix (14) is made of a rubber materials, a synthetic resin or a polymeric materials, a preferred embodiment of the textile process for incorporating the metal yarn (12) and the soft matrix (14) together can be a sewing process, in practical application, when the soft matrix (14) of the heating apparatus (10) according to the invention is one kind of rubber materials, a synthetic resin or a polymeric materials (paragraph [0023]).

With respect to claim 5, the garment is powered by connection to a self-contained power supply (32).

With respect to claim 6, the garment comprising an additional base structure with a thermally conductive area applied thereto (paragraph [0034]).

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148

USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

8. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lin et al. (US2003/0006229A1) in view of Orban et al. (US4764665).

Lin et al. discloses all the claimed limitations except silent with respect to self-contained power supply.

Orban et al. discloses a flexible garment system (10) [ column 3-4] which is capable of emitting heat when an electrical current is applied, the flexible garment system comprising an electrically insulating fiber base structure with an electrically and thermally conductive area (11) and bus bars (12) which supply power to at least two yarn based power supply lines (electrical connections through suitable metallic bus bars

Art Unit: 3742

are made to opposite end of metalized fabric, thus permitting current flow throughout entire surface of the fabric) all of which are incorporated during the manufacture of the flexible garment system. Metalized fabric between bus bars is considered as a power supply lines since current flows through entire surface. The electrically insulating base structure is woven fabric made of natural, regenerated or synthetic fibers (column 2, line 5). The electrically and thermally conductive area comprises a woven fabric made of metalized fabric, the fibers selected from the group consisting of fabric such as polyaramid, polyester, cotton, or other appropriate fabrics and may be metal coated either in multi-filament form and then woven into the fabric or may be metal coated in the as woven or the nonwoven formed state with metal coatings such as copper, nickel, silver, (column 3, lines 20-56) or a combination of these. The garment is powered by connection to a self-contained power supply (column 3, line 33-35). The garment has a further comprising an additional base structure with a thermally conductive area applied thereto.

It would have been obvious to one of ordinary skill in the art at the time of invention to provide a self-contained power supply as taught by Orban et al. for the comfort of the user for the flexible garment system of Lin et al.

#### **REMARKS**

9. Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to VINOD D. PATEL whose telephone number is (571)272-4785. The examiner can normally be reached on 7.15 A.M. TO 3.45 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tu B. Hoang can be reached on 571-272-4780. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Vinod D. Patel/ 1/31/11

Examiner, Art Unit 3742

/Geoffrey S Evans/

Primary Examiner, Art Unit 3742